

In the Claims:

Please amend claims 9 and 18. Please add new claims 21-26. The claims are as follows.

1. (Previously presented) A data communication method that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second protocol that is mapped onto the first protocol, said method comprising the acts of:

intercepting, by a client interceptor acting on behalf of a server application, a second-protocol data communication request from a client application;

mapping, by the client interceptor, the second-protocol data communication request onto the first protocol;

sending the communication request to a server interceptor using the first protocol;

compensating a disadvantageous characteristic of the first protocol, said compensating comprising ascertaining that a condition exists and eliminating the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition;

mapping, by the server interceptor, the communication request back onto the second protocol to recreate substantially the second-protocol data communication request; and

delivering the second-protocol data communication request to the server application.

2. (Previously presented) The method of claim 1, wherein the ascertaining comprises determining loss of a connection, and wherein the eliminating comprises re-establishing the connection.

3. (Previously presented) The method of claim 1, wherein the ascertaining comprises detecting that a connection is idle, and wherein the eliminating comprises dropping the connection and re-establishing the connection when a new communication request is intercepted.

4. (Previously presented) The method of claim 1, wherein the ascertaining comprises determining that transmission capacity is insufficient to process the data communication request within a predetermined interval of time, and wherein the eliminating comprises establishing a parallel connection to increase transmission capacity.

5. (Original) The method of claim 1, wherein the second protocol is connection oriented, and wherein the client interceptor and the server interceptor intercept a plurality of connections between the client application and the client interceptor using the second protocol, and between the server interceptor and the server application using the second protocol.

6. (Original) The method of claim 5, wherein the plurality of connections using the second protocol are multiplexed onto a single connection of the first protocol.

7. (Original) The method of claim 1, wherein the first protocol is a wireless communication protocol.

8. (Previously presented) The method of claim 1, further comprising the act of opening, by the client interceptor, a connection to the server interceptor using the first protocol following the act

of intercepting the second-protocol data communication request.

9. (Currently amended) A data communication method that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second protocol that is mapped onto the first protocol, said method comprising the acts of:

intercepting, by a client interceptor acting on behalf of a server application, a second-protocol data communication request from a client application;

mapping, by the client interceptor, the second-protocol data communication request onto the first protocol;

sending the communication request to a server interceptor using the first protocol;

compensating a disadvantageous characteristic of the first protocol;

mapping, by the server interceptor, the communication request back onto the second protocol to recreate substantially the second-protocol data communication request;

delivering the second-protocol data communication request to the server application; The method of claim 1, further comprising the acts of:

opening, by the client interceptor, a connection to the server interceptor using the first protocol following the act of intercepting the second-protocol data communication request; and

receiving, by the client interceptor, an identification of the server application; and

forwarding the identification to an address-resolution server for first-protocol address resolution.

10. (Previously presented) The method of claim 1, wherein the client application and the client interceptor reside on a same computing device.

11. (Previously presented) A data communication system that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second protocol that is mapped onto the first protocol, said system comprising:

a client interceptor acting on behalf of the server application, said client interceptor adapted to intercept a second-protocol data communication request from the client application, said client interceptor further adapted to map the second-protocol data communication request onto the first protocol;

a server interceptor adapted to map the communication request back onto the second protocol to recreate substantially the second-protocol data communication request;

means for sending the second-protocol data communication request to the server interceptor using the first protocol;

means for compensating a disadvantageous characteristic of the first protocol, said compensating comprising ascertaining that a condition exists and eliminating the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition; and

means for delivering the second-protocol data communication request to the server application.

12. (Previously presented) The system of claim 11, wherein the ascertaining comprises

determining loss of a connection, and wherein the eliminating comprises re-establishing the connection.

13. (Previously presented) The system of claim 11, wherein the ascertaining comprises detecting that a connection is idle, and wherein the eliminating comprises dropping the connection, and re-establishing the connection when a new communication request is intercepted.

14. (Previously presented) The system of claim 11, wherein the ascertaining comprises the acts of determining that transmission capacity is insufficient to process the data communication request within a predetermined interval of time, and wherein the eliminating comprises establishing a parallel connection to increase transmission capacity.

15. (Previously presented) The system of claim 11, wherein the second protocol is connection oriented, and wherein the client interceptor and the server interceptor are adapted to intercept a plurality of connections between the client application and the client interceptor using the second protocol, and between the server interceptor and the server application using the second protocol.

16. (Previously presented) The system of claim 15, wherein the plurality of connections using the second protocol are multiplexed onto a single connection of the first protocol.

17. (Previously presented) The system of claim 11, wherein the first protocol is a wireless communication protocol.

18. (Currently amended) The system of claim 11, further comprising:

means for opening, by the client interceptor, a connection to the server interceptor using the first protocol following intercepting the second-protocol data communication request. [[.]]

19. (Previously presented) The system of claim 18, further comprising:

means for receiving, by the client interceptor, an identification of the server application;
and

means for forwarding the identification to an address-resolution server for first-protocol address resolution.

20. (Previously presented) The system of claim 11, wherein the client application and the client interceptor reside on a same computing device.

21. (New) The method of claim 1, wherein the client application and the client interceptor reside on different computing devices.

22. (New) The method of claim 1, wherein the second protocol is connectionless.

23. (New) The system of claim 11, wherein the client application and the client interceptor reside on different computing devices.

24. (New) The system of claim 11, wherein the second protocol is connectionless.

25. (New) A data communication method that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second protocol that is mapped onto the first protocol, said method comprising:

receiving a data communication request directed by the client application to the server application, said request being received in accordance with the second protocol by a SOCKS client, said second protocol being a TCP/IP protocol;

redirecting the request in accordance with the second protocol to a client interceptor, said redirecting being performed by the SOCKS client using a SOCKS protocol;

intercepting the redirected request in accordance with the second protocol from the SOCKS client, said intercepting being performed by the client interceptor using the SOCKS protocol, said client interceptor acting on behalf of the server application;

mapping, by the client interceptor, the request in accordance with the second protocol onto the first protocol;

sending, by the client interceptor, the communication request in accordance with the first protocol to a server interceptor;

compensating, by the server interceptor, a disadvantageous characteristic of the first protocol, said compensating comprising ascertaining that a condition exists and eliminating the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition;

mapping, by the server interceptor, the request in accordance with the first protocol onto the second protocol; and

transmitting, by the server interceptor, the request in accordance with the second protocol

to the server application.

26. (Now) A data communication system that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second protocol that is mapped onto the first protocol, said system comprising:

a SOCKS client adapted to receive, in accordance with the second protocol, a data communication request directed by the client application to the server application, said second protocol being a TCP/IP protocol, said SOCKS client further adapted to redirect the request in accordance with the second protocol to a client interceptor using a SOCKS protocol;

the client interceptor acting on behalf of the server application, said client interceptor adapted to intercept the redirected request in accordance with the second protocol from the SOCKS client using the SOCKS protocol, said client interceptor further adapted to map the request in accordance with the second protocol onto the first protocol and to send the communication request in accordance with the first protocol to a server interceptor;

the server interceptor, wherein the server interceptor is adapted to:

compensate a disadvantageous characteristic of the first protocol by ascertaining that a condition exists and eliminating the condition in response to said ascertaining, said condition being a connection condition or a transmission capacity condition;

map the request in accordance with the first protocol onto the second protocol;

and

deliver the request in accordance with the second protocol to the server application.